Dehydration Will Ruin a Mission

By Lt. Jasmine Gough

Base, Iraq, from USS *Enterprise* (CVN-65), in support of an Operation-Iraqi-Freedom (OIF) detachment. The transit was a 4.5-hour flight from the carrier to the desert. In the past, I would dehydrate myself for these long flights for two reasons. First, I'm a female in a mostly male squadron. Second, I haven't had to use the piddle pack and relieve myself yet. I didn't feel I needed to drink as much because the weather was not very hot, and I wasn't sweating.

Upon my arrival in Iraq, I got my bearings with a quick tour of the base. The second day was a turnover day, so there was no flying. When the schedule came out on the third day, I was scheduled for my first OIF flight, a 6.7-hour flight.

"OK, it'll be all right", I thought. I can learn to relieve myself in the jet. I'm in the backseat alone, which is as good a time as any to practice. I had all the required paraphernalia, and I even had gotten a brief from a senior female aviator before I left on deployment. I've also had multiple conversations with other female aviators on this subject—I felt ready. But, I underestimated the effects of a dry-heat location.

Being on the ship in the Gulf, I got used to the sweaty humidity and quickly forgot about dry heat. I drank plenty of water on the boat, because after a day launch in the middle of summer, I would return drenched and obviously needed fluids. However, Iraq is so hot and dry, you don't realize you're still sweating.

Looking back, I had not realized how dehydrated

While sweating is an obvious means of water loss, it is not the only one. "Insensible losses" are those that you don't notice, and include water lost from dry skin or in exhaled breath. Insensible losses are especially important in dry environments. Because aviators often work in hot aircraft and breathe dry aviation oxygen, they can lose surprisingly large amounts of water from their skin and lungs without realizing it.

Don't depend on how much you're sweating to judge your hydration status. The best strategy is to drink plenty of fluids, and to make sure you're frequently making plenty of light yellow urine. When your urine is dark, the quantity is small, or you don't go very often, you're already dehydrated!—Cdr. Kevin E. Brooks, MD MPH, aeromedical analyst, Naval Safety Center.

I was before my first flight. The first night I arrived, I had a headache. I just figured it was a random headache that would go away by morning. The second day, I had a little more of a headache, but I guessed that exercising would help loosen some tension or stress. The third day, the day of my flight, I started with a short run on the treadmill and tried to drink more water. By midafternoon, my headache was much worse. I thought lying down and taking a short nap would help, but it didn't.

By dinnertime, the pain was excruciating. I thought if I had something in my stomach, I'd feel better, and the headache would go away. Then nausea set in, which was horrible, because I had nothing in my system. My head hurt so bad; it was the worst I've felt in a long time. I found a JO to take me to medical. I was embarrassed because I would have to tell the doc what I already knew: I didn't drink enough water, and I was going to be removed from the flight schedule.

They took some vitals, asked me some questions, and started the IV. After taking on one liter of saline solution, I was good to go. The flight doc prescribed antinausea medication, which downed me for an additional day, because of the possible drowsy effects that follow. I was instructed to drink two 1.5-liter bottles of water and one 1.5-liter bottle of Gatorade a day. I don't even like Gatorade, but I didn't want to miss any more flights.

The next morning I felt great. I downed plenty of water, completed my first OIF flight, and used the relief tube twice in one flight, another 6.7-hour mission. I even drank 1.5 liters of Gatorade later that day, after I found a flavor I liked.

Looking back, I intentionally was dehydrating myself for that first flight, and I know a lot of female aviators who do the same. Also, I am not in the habit of regularly drinking enough water, let alone drinking enough while in the desert in the middle of summer. I now drink an average of four to five liters of water a day, and I don't worry about using a piddle pack in the jet anymore. If the boys can do it, so can the girls.

Lt. Gough flies with VAQ-137.

For a related Approach article on this topic, visit: http://www.safetycenter.navy.mil/media/approach/issues/mar03/ToPeeOrNot.htm --Ed.

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